# **Section 1. Registration Information**

#### Source Identification

Facility Name:

Target FDC T-3893

Parent Company #1 Name: Parent Company #2 Name:

#### Submission and Acceptance

Submission Type: Re-submission

Subsequent RMP Submission Reason: Revised PHA / Hazard Review due to process

change (40 CFR 68.190(b)(5))

Description:

Receipt Date: 20-Sep-2012
Postmark Date: 20-Sep-2012
Next Due Date: 20-Sep-2017
Completeness Check Date: 20-Sep-2012
Complete RMP: Yes

De-Registration / Closed Reason:

De-Registration / Closed Reason Other Text:

De-Registered / Closed Date:

De-Registered / Closed Effective Date:

Certification Received: Yes

## **Facility Identification**

EPA Facility Identifier:

1000 0018 8968

Other EPA Systems Facility ID:

#### **Dun and Bradstreet Numbers (DUNS)**

Facility DUNS:

6961411

Parent Company #1 DUNS: Parent Company #2 DUNS:

## **Facility Location Address**

Street 1:

6111 W. Washington Street

Street 2:

 City:
 Phoenix

 State:
 ARIZONA

 ZIP:
 85043

ZIP4:

County: MARICOPA

#### Facility Latitude and Longitude

Latitude (decimal): 33.446944 Longitude (decimal): -112.194722

Lat/Long Method: Interpolation - Photo Lat/Long Description: Center of Facility

Horizontal Accuracy Measure: 25

Horizontal Reference Datum Name: North American Datum of 1983

Source Map Scale Number: 24000

Owner or Operator

Operator Name: Target Corporation
Operator Phone: (612) 761-5043

Mailing Address

Operator Street 1: 1000 Nicollet Mall TPN-1300
Operator Street 2: Attn: Risk Management

Operator City: Minneapolis
Operator State: MINNESOTA
Operator ZIP: 55403

Operator ZIP4:

Operator Foreign State or Province:

Operator Foreign ZIP: Operator Foreign Country:

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person: Marc Nunn
RMP Title of Person or Position: General Manager
RMP E-mail Address: Marc.Nunn@target.com

**Emergency Contact** 

Emergency Contact Name: Marc Nunn
Emergency Contact Title: General Manager
Emergency Contact Phone: (602) 732-5047
Emergency Contact 24-Hour Phone: (602) 826-8294

Emergency Contact Ext. or PIN:

Emergency Contact E-mail Address: Marc.Nunn@target.com

Other Points of Contact

Facility or Parent Company E-mail Address:

Facility Public Contact Phone:

Facility or Parent Company WWW Homepage

Address:

safety@target.com

Local Emergency Planning Committee

LEPC: Maricopa County LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site: 93

FTE Claimed as CBI:

Covered By

OSHA PSM: Yes EPCRA 302: Yes

CAA Title V:

Air Operating Permit ID:

#### **OSHA** Ranking

OSHA Star or Merit Ranking:

## Last Safety Inspection

Last Safety Inspection (By an External Agency)

Date:

Last Safety Inspection Performed By an External

Agency:

02-Apr-2012

**OSHA** 

#### **Predictive Filing**

Did this RMP involve predictive filing?:

## **Preparer Information**

Preparer Name:

Preparer Phone:

Preparer Street 1:

Preparer Street 2:

Preparer City:

Preparer State:

Preparer ZIP:

Preparer ZIP4:

Preparer Foreign State:

Preparer Foreign Country:

Preparer Foreign ZIP:

## Confidential Business Information (CBI)

CBI Claimed:

Substantiation Provided:

Unsanitized RMP Provided:

#### Reportable Accidents

Reportable Accidents:

See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

#### **Process Chemicals**

Process ID: 1000037390

Description: Ammonia Refrigeration Sys

Process Chemical ID: 1000045052

Program Level: Program Level 3 process
Chemical Name: Ammonia (anhydrous)

CAS Number: 7664-41-7

Quantity (lbs): 23920

CBI Claimed:

Flammable/Toxic: Toxic

## **Process NAICS**

Process ID: 1000037390
Process NAICS ID: 1000037769

Program Level: Program Level 3 process

NAICS Code: 49312

NAICS Description: Refrigerated Warehousing and Storage

## **Section 2. Toxics: Worst Case**

Toxic Worst ID: 1000030963

Percent Weight: 100.0

Physical State: Gas liquified by pressure Model Used: EPA's RMP\*Comp(TM)

Release Duration (mins): 10
Wind Speed (m/sec): 1.5
Atmospheric Stability Class: F
Topography: Urban

#### **Passive Mitigation Considered**

Dikes:
Enclosures:
Berms:
Drains:
Sumps:

Other Type:

## **Section 3. Toxics: Alternative Release**

Toxic Alter ID: 1000032833

Percent Weight:

Physical State: Gas liquified by pressure Model Used: EPA's RMP\*Comp(TM)

Wind Speed (m/sec): 3.0
Atmospheric Stability Class: D
Topography: Urban

#### **Passive Mitigation Considered**

Dikes: Enclosures: Berms: Drains: Sumps: Other Type:

#### **Active Mitigation Considered**

Sprinkler System:
Deluge System:
Water Curtain:
Neutralization:
Excess Flow Valve:

Flares: Scrubbers:

Emergency Shutdown: Yes

Other Type:

# **Section 4. Flammables: Worst Case**

No records found.

# Section 5. Flammables: Alternative Release

No records found.

# **Section 6. Accident History**

No records found.

# Section 7. Program Level 3

## Description

OSHA's Process Safety Management (PSM) Program.

## Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID: 1000038754

Chemical Name: Ammonia (anhydrous)

Flammable/Toxic: Toxic CAS Number: 7664-41-7

Prevention Program Level 3 ID: 1000032690 NAICS Code: 49312

## Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):

30-Aug-2012

#### Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):

25-Apr-2012

## The Technique Used

What If:

Checklist:

What If/Checklist:

Yes

HAZOP:

Failure Mode and Effects Analysis:

Fault Tree Analysis: Other Technique Used:

PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):

11-Sep-2012

## Major Hazards Identified

Toxic Release:

Yes

Fire: Explosion: Yes Yes

Runaway Reaction:

Polymerization:

Yes

Overpressurization: Corrosion:

Yes

Overfilling:

Yes

Contamination:

**Equipment Failure:** 

Yes

Loss of Cooling, Heating, Electricity, Instrument Air: Yes

Earthquake:

Floods (Flood Plain):

Yes

Tornado: Hurricanes:

Other Major Hazard Identified:

## Process Controls in Use

Vents: Yes
Relief Valves: Yes
Check Valves: Yes

Scrubbers:

Flares:

Manual Shutoffs:

Automatic Shutoffs:

Interlocks:

Alarms and Procedures:

Yes

Yes

Keyed Bypass:

Emergency Air Supply:

Emergency Power: Yes Backup Pump: Yes

Grounding Equipment: Inhibitor Addition: Rupture Disks: Excess Flow Device: Quench System:

Purge System:

None:

Other Process Control in Use:

## Mitigation Systems in Use

Sprinkler System: Yes

Dikes:
Fire Walls:
Blast Walls:
Deluge System:
Water Curtain:
Enclosure:
Neutralization:
None:

Other Mitigation System in Use:

Isolation Valves, Dilution Tank

## Monitoring/Detection Systems in Use

Process Area Detectors: Yes

Perimeter Monitors:

None:

Other Monitoring/Detection System in Use:

## Changes Since Last PHA Update

Reduction in Chemical Inventory:

Increase in Chemical Inventory: Yes

Change Process Parameters: Installation of Process Controls:

Installation of Process Detection Systems:

Facility Name: Target FDC T-3893 EPA Facility Identifier: 1000 0018 8968

Installation of Perimeter Monitoring Systems:

Installation of Mitigation Systems:

None Recommended:

None:

Other Changes Since Last PHA or PHA Update:

#### **Review of Operating Procedures**

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 30-Jul-2012

Plan Sequence Number: 1000030691

#### **Training**

Training Revision Date (The date of the most recent 31-May-2012 review or revision of training programs):

## The Type of Training Provided

Classroom: Yes
On the Job: Yes

Other Training: Industrial Refrigeration Consortium

#### The Type of Competency Testing Used

Written Tests: Yes
Oral Tests: Yes
Demonstration: Yes
Observation: Yes

Other Type of Competency Testing Used:

#### Maintenance

Maintenance Procedures Revision Date (The date of 11-Sep-2012 the most recent review or revision of maintenance procedures):

Equipment Inspection Date (The date of the most recent equipment inspection or test):

27-Apr-2012

Equipment Tested (Equipment most recently inspected or tested):

Compressor, Dilution Tank

#### Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):

14-Aug-2012

Change Management Revision Date (The date of the most recent review or revision of management of change procedures):

30-Jul-2012

## **Pre-Startup Review**

Facility Name: Target FDC T-3893

EPA Facility Identifier: 1000 0018 8968 Plan Sequence Number: 1000030691

Pre-Startup Review Date (The date of the most recent pre-startup review):

06-May-2012

## **Compliance Audits**

Compliance Audit Date (The date of the most recent 30-Jul-2012 compliance audit):

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):

01-Nov-2012

#### Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):

01-Aug-2012

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

28-Aug-2012

## **Employee Participation Plans**

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):

30-Jul-2012

#### Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most 20-Sep-2012 recent review or revision of hot work permit procedures):

## **Contractor Safety Procedures**

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):

20-Sep-2012

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):

30-Jul-2012

## **Confidential Business Information**

CBI Claimed:

Facility Name: Target FDC T-3893 EPA Facility Identifier: 1000 0018 8968

Plan Sequence Number: 1000030691

# **Section 8. Program Level 2**

# **Section 9. Emergency Response**

## Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):

Yes

Facility Plan (Does facility have its own written emergency response plan?):

Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):

Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?):

Yes

#### **Emergency Response Review**

Review Date (Date of most recent review or update 14-Jun-2012 of facility's ER plan):

#### **Emergency Response Training**

Training Date (Date of most recent review or update 01-Aug-2012 of facility's employees):

#### Local Agency

Agency Name (Name of local agency with which the Phoenix Fire Department facility ER plan or response activities are coordinated):

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):

(602) 534-6559

Yes

## Subject to

OSHA Regulations at 29 CFR 1910.38: Yes OSHA Regulations at 29 CFR 1910.120: Yes

Clean Water Regulations at 40 CFR 112:

RCRA Regulations at CFR 264, 265, and 279.52: OPA 90 Regulations at 40 CFR 112, 33 CFR 154,

49 CFR 194, or 30 CFR 254:

State EPCRA Rules or Laws:

Other (Specify):

## **Executive Summary**

Target Food Distribution Center T-3893 Phoenix, Arizona 85043 Risk Management Plan for Anhydrous Ammonia (21,920 LBS)

#### **Executive Summary**

This facility, located at 6111 West Washington Street, Phoenix, Arizona is a leased refrigerated warehousing facility owned by KTR Arizona LLC and operated by Target Corporation for the storage and distribution of perishable and frozen food products. Target assumed a partnership with SUPERVALU in March 2007 during which time SUPERVALU was responsible for day to day activities of the building. On September 18, 2011 Target assumed control of operations and is responsible for the daily maintenance and operations of the building.

The facility was built in 3 phases, 1977, 1983 and 1995 for Fry's Foods Inc, a division of the Kroger Company. The facility was most recently operated by Atlas Cold Storage Holdings until May 2006. The facility was then bought under a purchase option from Dillon Real Estate Company (a subsidiary of the Kroger Companies) by Atlas Cold Storage Holdings on May 12, 2006 and sold on the same day to KTR Arizona LLC. KTR initiated and contracted for a number of renovation projects impacting facility refrigeration systems between September 2006 and March 2007 as part of a lease agreement with Target Corporation to prepare the facility for current operations. These projects included the following:

- Renovation of the Perishable Building Engine Room.
- Modifications to refrigeration piping and evaporators north of Perishable Building Engine Room.
- Modifications to refrigeration piping and evaporators south of Perishable Building Engine Room.
- Removal of ice making equipment from the Freezer Building.
- Replacement of the Freezer Building refrigeration system evaporative condensers.
- Major Compressor overhauls and repairs for the Freezer Building refrigeration system.

During the time starting approximately November 2006, when KTR Arizona LLC was renovating the facility, Target audited the applicability of the previous operator's Process Safety Management Plan (PSM) and Risk Management Plan (RMP) documentation. Target found it to be incomplete, inadequate and not appropriate for compliance of the new operating entities. SUPERVALU in partnership with Target established new PSM and RMP programs for the facility. Upon announcement of the dissolution of partnership with SUPERVALU in July 2011, a team of Target team members specializing in PSM and refrigeration reviewed the existing program and outlined a number of improvements to be completed by both Target and SUPERVALU team members. Target assumed building operations on September 18, 2011 under a new Process Safety Management Plan in accordance to all federal, local, and state regulations.

#### 1. Accidental Release Prevention and Emergency Response Policies

Target recognizes that accidents involving the ammonia refrigeration system and other equipment is an ever present risk to the health of team members and the community. Target is committed to safety at every level. Target's prevention solutions include both technology as well as an active business unit that is qualified to monitor and manage the refrigeration and PSM program. The revised Process Safety Management (PSM) program and Risk Management Plan (RMP)are living documents, defining the administrative and operational processes to be utilized during and after the facility's turnover, September 18, 2011. Target also reserves the right to modify and adapt its PSM and RMP plans as appropriate to address changes in our business processes, as well as things deemed ineffective. The overall intent of these programs is to minimize or eliminate the following potential threats for achieving a safe work place and zero refrigerant releases:

- Human error in operating or maintaining ammonia refrigeration systems.
- Human error when working around or near ammonia refrigeration system components.
- Lack of knowledge regarding ammonia refrigeration systems and their inherent hazards.
- Inappropriate response to incidents involving ammonia refrigeration systems.
- Unanticipated mechanical failures associated with refrigeration system components.
- Unsafe situations inadvertently created by multiple changes over time to ammonia refrigeration systems and other facility equipment or operations which may impact the refrigeration systems.

The PSM Program serves as a reference manual to provide building team members specific procedures for implementing the program. In general, element guidelines describe the following:

- Functions of individual elements.

- Repeatable processes to be followed.
- Utilization of employee resources.
- Contingency plans for emergencies.
- Measures to be used for evaluating the effectiveness of the program.
- Method to evaluate risk associated with ammonia refrigeration systems.
- Maintenance and update of PSM elements.
- Provisions for feedback and continuous improvement.

The program is complex and has been developed by integrating facility safety programs with maintenance management, facility operations, and human resources management.

At the Phoenix Food Distribution Center T-3893, Target is committed to employee, public, and environmental safety. This commitment is inherent to our comprehensive accidental release prevention program, covering design, installation, operating procedures, maintenance, and employee training associated with our regulated process. It is our policy to implement appropriate controls to prevent possible releases of regulated substances. Unforeseeably, if such a release does occur, Target has proactively partnered with Phoenix Fire Department to insure that properly trained and equipped hazmat responders are available to control and mitigate the effects of a release. We also will coordinate such events with Maricopa County Local Emergency Planning Committee for additional support.

#### 2. Stationary Source and Regulated Substances Handled

This facility is a refrigerated warehouse facility. The vast majority of products stored are refrigerated foods for human consumption and inherently pose no known environmental or safety risks. The RMP regulated substance present at the facility is anhydrous ammonia, utilized as refrigerant in closed-loop refrigeration systems. The facility is serviced by 2 independent refrigeration systems, a Perishable Building system, total charge inventory of 9,920 lbs and the Freezer Building system, total charge inventory of 12,000 pounds. The refrigeration systems do not interconnect nor are their major storage vessels rest in close proximity to one another. As a result, it is unlikely that the charge of both systems could be discharged without a disaster scenario which would encompass the entire site such as a natural disaster or well planned act of aggression.

In a worst case release scenario involving the entire site, release of total charge from both refrigeration systems needs to be considered for the purposes of this RMP. The combined total inventory of anhydrous ammonia is 21,920 pounds.

Due to the and characteristics of the building's ammonia systems as well as Process Safety Management (PSM) applicability, this building is covered under Program 3 of the RMP regulations.

#### 3. General Accidental Release Prevention Program and Chemical-Specific Prevention Steps

Necessary processes to comply with the accidental release prevention requirements set out under 40 CFR Part 68 has been implemented and is ongoing. The facility is also subject to OSHA's PSM standard under 29 CFR 1910.119, as well as the EPCRA Section 302 and 311/312 notification/reporting requirements. The following sections briefly describe elements and status for accidental release prevention programs in place at the facility.

#### Process Safety Information (PSI):

The Process Safety Information Guideline and inventory list of necessary documents are in place. Available PSI documentation from previous operators and construction documents were consolidated along with P&IDs, 4 generations of construction drawing and specifications, ammonia safety data, and equipment manuals. All documentation can be found at the building in the care of the Senior Facility Operations Group Leader. This information will be revised as the ammonia refrigeration system is updated or altered. This data contains detailed safety information that describes the chemical hazards, operating parameters, and equipment designs associated with the ammonia refrigeration system.

#### Process Hazard Analysis (PHA):

The Process Hazard Analysis PSM Guideline and full PHA study has been completed as part of operational transition from SUPERVALU to Target. The methodology used was the What If Scenarios. Representatives from both Target and SUPERVALU, with expertise in refrigeration engineering and operations participated in the studies.

The adopted PHA Guideline calls for studies to be reevaluated at a minimum of every five (5) years and any findings related to process hazard analysis studies to be addressed in a timely manner.

#### Operating Procedures:

An Operating Procedures PSM Guideline is in place which defines the processes for drafting, validating, and maintaining written operating procedures, including annual reviews. Safe Operating Procedures are in place that addresses necessary modes of

operation including startup, normal operations, emergency operations, normal shutdown, emergency shutdown, and pump out.

#### Training -

New Training PSM Guideline was adopted, which defines training programs for employees working with the ammonia refrigeration systems to increase competence in all relevant operating procedures. Refresher training specified to take place at a minimum every three (3) years and more frequently as needed.

#### Mechanical Integrity:

The Mechanical Integrity PSM Guideline is in place. Maintenance operations are being carried out by qualified personnel with previous training in ammonia refrigeration system maintenance practices.

Any equipment deficiencies identified by ongoing maintenance checks are corrected in a safe and timely manner.

A checklist of pre-existing Mechanical Integrity issues, not addressed as part of the building owner renovations, has been compiled and planning for corrective actions is in process.

#### Management of Change:

The Management of Change PSM Guideline is in place. The guideline defines procedures that are in place to manage changes in ammonia systems technology, equipment, and procedures. Process operators, maintenance personnel, or any other employee whose job tasks are affected by an ammonia systems modification are promptly made aware of and offered training to deal with the modification

#### Pre-Startup Reviews:

The Pre-Startup Review PSM Guideline is in place, which stipulates that Pre-start up safety reviews are conducted any time the ammonia refrigeration system or any of its components are opened to atmosphere for repairs, tie-ins, or modifications. These reviews are conducted to confirm that construction is complete, documentations still accurate, operating procedures in place, training is complete and safety pre-cautions are suitable for safe startup prior to placing equipment into operation.

#### Compliance Audits:

A Compliance Audit PSM Guideline is in place specifying the process and frequency for evaluation of PSM and RMP program effectiveness. These audits are to be carried out at least every three (3) years and any corrective actions required as a result of the audits are undertaken in a safe and prompt manner.

The last known and documented compliance audit carried out by previous facility operator, SUPERVALU in April 2011.

#### Incident Investigation:

New Incident Investigation PSM Guideline is in place describing processes to promptly investigate any incident that has resulted in, or could reasonably result in, an unintentional release of ammonia. These investigations are to identify situations leading to incidents, as well as corrective actions implemented to prevent reoccurring and future releases, with reports retained for a minimum of five (5) years.

#### **Employee Participation:**

An Employee (team member) Participation PSM Guideline is in place to describe team member utilization in the development and implementation of the facility's PSM and RMP programs. In addition, the guideline identifies new team member orientation; training and communication processes to be followed for educating team members about the hazards associated with anhydrous ammonia and safety programs in place to mitigate risks of injury and accidental release. This includes processes for making all PSM and RMP information related to implementation, including Process Hazard Analyses (PHA) information available to team members. Team members are encouraged to report unsafe conditions, express their views concerning accident prevention issues and to recommend improvements.

#### Contractors:

A Contractors PSM Guideline is in place for contractors utilized to conduct specialized maintenance and/or construction activities related to the ammonia refrigeration system.

The new Contractors Guideline mandates a pre-qualification process which includes evaluation of contractor safety records, documented understanding of the facility's work rules, and commitment to ongoing training of their employees, as related to the hazards associated with ammonia refrigeration systems. Target is committed to continually informing contractors regarding known

potential hazards related to work with ammonia systems and the facilities procedures for emergency response should an accidental release of ammonia occur.

#### 4. Five-year Accident History

This is the initial RMP submittal after the change in operating entities.

#### 5. Emergency Action Plan

An Emergency Action Plan PSM Guideline is in place to identify specific procedures implemented in the event of various emergencies, including an ammonia release. The Emergency Action Plan addresses adequate first aid and medical treatment, evacuations, notification of local emergency response agencies and the public, as well as post-incident decontamination of affected areas.

#### 6. Planned Changes to Improve Safety

Many elements of the Process Safety Management have been utilized as part of the facility's transition process and the operational transition. As identified in this document, mechanical integrity checklists, outstanding construction issues, missing information, and process hazard analysis recommendations have been generated to minimize the risk of injury or accidental release. It is intended that the new PSM and RMP programs implemented for the facility drive a proactive approach that improves safety and refrigerant release prevention, utilizing constant review processes of operations and activities, to assure a safe environment for team members and the community of Phoenix.